

EDGE




TORCH-X™

HQ

C⁵ISR SYSTEM ENABLING MULTIDOMAIN WARFARE
AND ENHANCED OPERATIONAL EFFECTIVENESS
FOR TACTICAL, OPERATIONAL AND STRATEGIC
LEVEL HQ





ENABLING MULTIDOMAIN WARFARE AND ENHANCED OPERATIONAL EFFECTIVENESS FOR TACTICAL, OPERATIONAL AND STRATEGIC LEVEL HQ



TACTICAL, OPERATIONAL AND STRATEGIC NEED

Multidomain warfare requires an adaptable and secure framework to enhance operational effectiveness and strategic planning. To minimize the cognitive load on headquarter staff, the operational framework must be capable of efficient data management and seamless integration, as well as coordination and control of a wide range of manned and unmanned sensors and effectors.





SOLUTION OVERVIEW

Torch-X HQ is a field-proven C⁵ISR solution for tactical headquarters (Battle Groups and Task Forces) and strategic headquarters (from Division level and up to the Joint Command). The cross-platform, comprehensive solution provides real-time data, advanced voice services and live video streaming with automatic, secure, location and COI-based dissemination of near real-time relevant information. Torch-X HQ allows headquarters to generate superior tempo relative to their adversary and shortens the decision-action cycle for the delivery of kinetic and non-kinetic effects in the battlespace.

Torch-X HQ incorporates advanced cyber defense capabilities to protect against the modern and ever-changing threat landscape.



AI-based decision support: Designed to meet the challenges of multidomain warfare against a peer adversary, Torch-X HQ supports and optimizes planning and execution activities to meet the needs of specific military operations, intelligence preparation of the battlefield, intelligence planning, analysis and scoping, Courses of Action (COA) development and testing, COA approval and orders distribution.

Planning processes supported by Torch-X HQ meet Five-Eyes network demands and military doctrines, including:

- Military Decision-Making Process (MDMP) – US Army
- Tactical Estimate Process (TE) – UK Army
- Staff Military Appreciation Process (SMAP) – Australian Army

Operation of manned and unmanned systems:

Torch-X HQ includes operational features for manned and unmanned systems. The solution supports different levels of human involvement in tasking unmanned systems, from fully automated to semi-automated planning and execution. Torch-X HQ can be easily tailored to support any level of unmanned system autonomy.

Open architecture: Torch-X HQ is based on Elbit Systems E-CiX framework. The fast and efficiently developed modular framework is based on commoditized existing building blocks using industry standards and open architecture, and offers its capabilities in an “as a service” model. It can accommodate third party applications and provides the development environment for future growth and requirements.



Intuitive user experience: A simple and intuitive web-based user interface is based on the principle of recognition rather than recall at its core, using modern and familiar building blocks. This reduces both the cognitive load and training burden for the user. Torch-X HQ autopopulates key products as staff complete their decision-making process. Users can customize the Torch-X HQ operating picture to meet their specific staff cell requirements.

Security: Torch-X HQ is a secured battle management system, designed and developed as a secured system from the ground up. The system is accredited for the Five Eyes network and meets Five Eyes security standards. Torch-X HQ is penetration tested on a regular basis and incorporates Elbit Systems CyberShield, a sophisticated, military-grade solution that performs continuous cyber health monitoring and preventive actions to withstand adversary cyber security threats.





KEY FEATURES

Supports all battlefield domains and disciplines

Powerful data synchronization that overcomes network limitations

Distributed cloud-based architecture to facilitate continuity of operations

AI-based decision support tools for battle planning and battle execution

Autonomous nodes with no single point-of-failure

Supports both human troops and autonomous robotic troops

Supports numerous interoperability standards

KEY BENEFITS

Collaborative planning and battle management

Common situational awareness

Supports all military operations, structures and methods

Simple and intuitive user interface

Built-in advanced cyber threat protection